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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,065

Applicant(s)

KANG, SUNG-MIN

Examiner

Willie J. Daniel, Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's RCE filed on 19 October 2004 and amendment filed on 19 August 2004. **Claims 2, 4-5** are now pending in the present application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 October 2004 has been entered.

Claim Objections

3. **Claim 4** is objected to because of the following informalities:
 - a. Applicant states pg. 2, line 4 "...with of a...". Examiner requests the applicant to clarify the claim language and suggests, for example, "...with a...".
 - b. Applicant states on pg. 3, line 9 "...value of message...". Examiner requests the applicant to clarify the claim language and suggests, for example, "...value of the message...".

Appropriate correction is required.

4. This list of examples is not intended to be exhaustive.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by **Wong (WO 93/21715)**.

Regarding **Claim 2**, Wong discloses a method for processing a message in a cellular base station system (Fig. 1) including a plurality of base stations (38, 40, 42) which reads on the claimed “subsystems” using a plurality of versions of software package (e.g., 478, 572, 620) which reads on the claimed “message processing software” (see pg. 9, lines 11-16; pg. 13, lines 20-29; abstract), wherein an updated version processes at least one additional information field included in the message as compared with a previous version (see abstract; pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 5, 7, 9-10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed, the method comprising the steps of:

receiving, in a target subsystem (38, 40, 42), a message including at least a message header from a source subsystem (38, 40, 42), the message header identifying the version of the software package (e.g., 478, 572, 620) which reads on the claimed “message processing software” of the source subsystem (38, 40, 42) (see pg. 5, lines 9-17; abstract; Fig. 1-2, 5, 7, 10);

comparing, in the target subsystem (38, 40, 42), the value contained in the received message header with version of the message processing software (e.g., 478, 572, 620) executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18; abstract), where the communications takes place between the systems and subscribers which have different corresponding software packages and features;

processing, in the target subsystem (38, 40, 42), the received message including the added information field, if the version value of the software package (e.g., 478, 572, 620) which reads on the claimed "message processing software" executing on the software subsystem is equivalent to the version value of the message processing software executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9-10), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages in which the processing of equivalent fields would be inherent since the systems provide the same services according to the software; and

processing, in the target subsystem (38, 40, 42), the received message excluding the added information field, if the version value of the message processing software (e.g., 478, 572, 620) executing on the target subsystem is not equivalent to the version value of the message processing software executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, line 20 - pg. 14, line 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9-10), where the systems will provide a handshake to

determine which software version and features are running on the systems, so the target system can know how to handle received messages in which the processing would be inherent for the systems, which may ignore the additional field of the software due to the services offered between the systems which may vary according to the software version running on the different systems. The software packages vary in size according to the features and services offered (see Figs. 5, 7, 9-10).

Regarding **Claim 4**, Wong discloses a method for processing a message in a cellular base station system (Fig. 1) including a plurality of subsystems (38, 40, 42) using a plurality of versions of software package (e.g., 478, 572, 620) which reads on the claimed “message processing software”, wherein an updated version processes at least one additional information field included in the message as compared with of a previous version (see abstract; pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 5, 7, 9-10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed, the method comprising the steps of:

generating, in a source subsystem (38, 40, 42), a heading code fields which reads on the claimed “message header” including an information field which reads on the claimed “version field” having a source current running version value (see pg. 5, lines 9-17; Figs. 2-3, 5);

generating, in the source subsystem (38, 40, 42), a message including the generated message header (see pg. 5, line 9-17; Figs. 2-3, 5);

transmitting, in the source subsystem (38, 40, 42), the generated message from the source subsystem to a target subsystem (38, 40, 42) (see abstract; pg. 5, lines 6-17; pg. 5, line 22 - pg. 6, line 8; pg. 9, lines 11-16; Figs. 1-3, 5), where this signaling protocol can be used between different types of communication systems (e.g., cellular base station system) in which the base station controller and base station manager would be inherent;

comparing, in the target subsystem (38, 40, 42), the version value in the received message header with a version value of message processing software (e.g., 478, 572, 620) executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the communications takes place between the systems and subscribers which have different corresponding software packages and features;

processing, in the target subsystem (38, 40, 42), the received message including the added information field, if the version value of message processing software (e.g., 478, 572, 620) executing on the source subsystem (38, 40, 42) is equivalent to the version value of the message processing software (e.g., 478, 572, 620) executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; abstract; Figs. 1, 5, 7, 9-10), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages in which the processing of equivalent fields would be inherent since the systems provide the same services according to the software; and

processing, in the target subsystem (38, 40, 42), the received message excluding the added information field, if the version value of the message processing software (e.g., 478,

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572, 620) executing on the source subsystem (38, 40, 42) is not equivalent to the version value of the message processing software (e.g., 478, 572, 620) executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; abstract; Figs. 1, 5, 7, 9-10), where the systems will provide a handshake to determine which software version and features are running on the systems, so the target system can know how to handle received messages in which the processing would be inherent for the systems, which may ignore the additional field of the software due to the services offered between the systems which may vary according to the software version running on the different systems. The software packages vary in size according to the features and services offered (see Figs. 5, 7, 9, and 10).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wong (WO 93/21715)** in view of **Rojestal (US 6,074,435)** and **Scholz et al. (hereinafter Scholz) (US 5,421,017)**.

Regarding **Claim 5**, Wong teaches of having a method for processing messages in a cellular base station subsystem including a plurality of subsystems (38, 40, 42) using a

plurality of versions of software package (e.g., 478, 572, 620) which reads on the claimed “message processing software”, wherein an updated version processes at least one additional information field included in the message as compared with a message of a previous version (see abstract; pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9-10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed, the method comprising the steps of:

installing, in a radio equipment (e.g., base station controller, exchange, MSC) which reads on the claimed “base station manager” for controlling the base station subsystem, an updated (e.g., specific service and/or different release) version of the message processing software (e.g., 478, 572, 620) (see pg. 13, lines 20-29; pg. 5, lines 9-17; abstract; Fig. 1), where the operators of the equipment have software installed to provide the various services in which the different software package versions provides the available features and/or capabilities.

downloading (e.g., installing) a selected one of the updated version of the message processing software and the previous version of the message processing software from the base station manager (e.g., base station controller, exchange, MSC) and installing the downloaded updated (e.g., specific service and/or different release) version of the message processing software (e.g., 478, 572, 620) (see pg. 13, lines 20-29; pg. 5, lines 9-17; abstract; Fig. 1), where the operators of the equipment have software installed (downloaded) to provide the various services of the different software package versions for the equipment to

operate using the available specific features and/or capabilities of the software. For example, the base station would download the software from the base station manager (e.g., base station controller, exchange, MSC).

processing, in the target subsystem (38, 40, 42), all fields of the received message using the updated version of the software, if the version value of the message processing software (e.g., 478, 572, 620) executing on the source subsystem (38, 40, 42) is equivalent to a version value of the message processing software (e.g., 478, 572, 620) executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; abstract; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages in which the processing of equivalent fields would be inherent since the systems provide the same services according to the software; and

processing, in the target subsystem (38, 40, 42), fields of the received message known to the previous version of the software, if the version value of the message processing software (e.g., 478, 572, 620) executing on the source subsystem is not equivalent to the version value of the message processing software (e.g., 478, 572, 620) executing on the target subsystem (38, 40, 42) (see pg. 5, lines 9-17; pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; abstract; Figs. 1, 5, 7, 9-10), where the systems will provide a handshake to determine which software version and features are running on the systems, so the target system can know how to handle received messages in which the processing would be inherent for the systems, which may ignore the additional

field of the software due to the services offered between the systems which may vary according to the software version running on the different systems. The software packages vary in size according to the features and services offered (see Figs. 5, 7, 9-10). Wong fails to disclose having the features and then backing up a previous version of the message processing software; when at least on of the plurality of subsystems restarts. However, the examiner maintains that the feature and then backing up a previous version of the message processing software was well known in the art, as taught by Scholz.

In the same field of endeavor, Scholz discloses the feature and then backing up a previous version of the software which reads on the claimed "message processing software" (see col. 4, lines 17-33; col. 5, lines 19-31), where the control system has a switch-over process to allow switching between versions of software in which a system can return to the previous software version.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong and Scholz to have the feature and then backing up a previous version of the message processing software, in order to provide compatibility and coexistence of new to old software and immediately return to the older software version without interrupting operations in case the new software proves faulty, as taught by Scholz (see col. 6, lines 610; col. 5, lines 26-30). The combination of Wong and Scholz fail to disclose having the feature when at least on of the plurality of subsystems restarts. However, the examiner maintains that the feature when at least on of the plurality of subsystems restarts was well known in the art, as taught by Rojestal.

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In the same field of endeavor, Rojestal discloses the feature when at least on of the plurality of subsystems restarts (see col. 4, lines 48-63; col. 6, lines 5-12; Figs. 7, 10, 11), where the base station (107) restart (ref. 77) during the downloading of software.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong, Scholz, and Rojestal to have the feature when at least on of the plurality of subsystems restarts, in order to remotely be able to download and replace the software with a newer version in a base transceiver station, as taught by Rojestal (see col. 3, lines 52-63).

Response to Arguments

7. Applicant's arguments filed on 19 October 2004 (RCE) and 19 August 2004 (amendment) have been fully considered but they are not persuasive.

Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support (see the above claims and comments in this section).

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., different versions of the **same** software program) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding applicant's argument (see pg. 5, 3rd paragraph - pg. 6, 2nd paragraph), "Wong does not teach using different versions of the same software program". The Examiner respectfully disagrees. Wong discloses having a software package with different releases (see pg. 13, lines 25-29; abstract).

9. Regarding applicant's argument of Claim 2, 4 (see pg. 6, 4th paragraph), "Wong does not teach *comparing the version in the received message header with the version of the message processing software executing on the target subsystem; processing in the target subsystem, the received message including the added information field, if the source subsystem version is equivalent to the target subsystem version; and processing, in the target subsystem, the received message including the added information field, if the source*

subsystem version is not equivalent to the target subsystem version" (see above Claims 2, 4).

Examiner respectfully disagrees. Wong discloses communicating messages between a originating station and destination station using software package(s) that provide specific features and communications capabilities (see pg. 5, lines 7-21; pg. 5, line 26 - pg. 6, line 7; pg. 9, lines 11-19; pg. 14, lines 16-32; abstract; Fig. 1), where the message includes identifying information (e.g., header) that is processed between the systems according the features and capabilities of the software of the system that is verified during situations such as when the systems handshake. The software package may vary in size according to the features and capabilities as well as the release or version of the software (see pg. 13, lines 20-29; pg. 16, lines 11-22), where the specific software package has a specific field length that identifies the software package of the message. The system will process the message based on the features and capabilities of system.

10. Regarding applicant's argument of Claim 5, the claim is rejected for the same reasons as set forth above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Genell (US 6,324,411 B1) discloses "Background Software Loading In Cellular Telecommunication System".
 - b. Phillips (US 6,188,898 B1) discloses "Mobile Communications Network".
 - c. Wong (US 5,408,419) discloses "Cellular Radiotelephone System Signalling Protocol".

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR
28 January 2005

Marsha D Banks-Harold
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